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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/402,796	12/22/1999	CHRISTINE DUPUIS	05725.0481	6460

7590

07/31/2002

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EXAMINER

WELLS, LAUREN Q

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/402,796

Applicant(s)

DUPUIS, CHRISTINE

Examiner

Lauren Q Wells

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 16-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 16-37 are pending. The Amendment filed April 30, 2002, amended claims 22, 26, 28 and 29.

#### ***Request for Continued Examination***

The request filed on April 30, 2002 for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/402796 is acceptable and an RCE has been established. An action on the RCE follows.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1) Claims 16-37 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 6,080,392. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed toward analogous hair compositions comprising, in a cosmetically acceptable medium, at least one associative polyurethane polymer, and at least one anionic polymer.

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2) Claims 16-37 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application No. 09265850, Application No. 09402801, and Application No. 09402797. Although the conflicting claims are not identical, they are not patentably distinct from each other because all sets of claims are directed toward analogous hair compositions comprising, in a cosmetically acceptable medium, at least one associative polyurethane polymer, and at least one anionic polymer.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16, 20-22, 26-27, 29-33, 35-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(i) The term “hydrocarbon-based” in claims 16, 35, 36, 37 (adjacent to R3 definition), is vague and indefinite, as it is not clear what this term means. What besides hydrocarbons does R3 comprise? Chemically, how does based describe hydrocarbon?

(ii) The term “obtained by” in claims 20, is vague and indefinite, as the metes and bounds of this claim are not clear. Does this mean that the combination of hexamethylene diisocyanate and polyethylene glycol results in formula (i)?

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(iii) The term “chemically, enzymatically or microbiologically modified soluble starch” in claim 21 (lines 3-4) is vague and indefinite, as it is not clear what chemical compound is being claimed. The specification does not define these starches and one of ordinary skill in the art would not be apprised of all the variations of starches produced by such means.

(iv) The term “higher C8-C22 fatty acids” in claim 27, is vague and indefinite. Does higher refer to C8-C22 or does higher refer to, for example, C20-22?

(v) The phrase “% by weight of active material” in claims 30-33 is vague and indefinite, as it is not clear what the active material is. Is the active material, the combination of polyurethane and anionic polymer?

(vi) The term “derivatives” in claims 22 (line 4), 26 (line 3), 29 (line 4) is vague and indefinite, as is the metes and bounds of these claims are unascertainable. It is not clear what chemical compounds are encompassed by this phrase. Regarding this term, Applicant argues, “The phrase is directed to a compound obtained from another and containing the essential elements of the parent substance”. This argument is not persuasive. Chemically, what are the essential elements of the parent substance. Furthermore, given the innumerable possibilities for modifying a single compound, it would be impossible for one to know what compounds are encompassed by the term “derivatives”.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 16-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupuis (6,080,392) in view of Emmons et al. (4,155,892), in further view of Principe et al. (5,385,729).

Dupuis et al. teach a composition in the form of an aerosol mousse based on polyurethane and anionic polymer. The polyurethanes are disclosed as containing at least one hydrophilic sequence, at least one hydrophobic sequence and at least one urethane group. Formula (IV) of the reference is the same generic formula as that of formula (I) of the instant invention. Anionic polymers containing groups derived from carboxylic, sulphonic, or phosphoric acid are disclosed. Carboxylic acids are disclosed as chosen from acrylic, crotonic, maleic, fumaric, and itaconic acids. Sulphonic acids are disclosed as chosen from vinylsulphonic and styrenesulphonic acids. Examples of some preferred anionic polymers include, homopolymers or copolymers of acrylic or methacrylic acid, copolymers of acrylic or methacrylic acid with aminoethylene monomer, copolymers derived from crotonic acid and at least one other monomer, polymers derived from maleic, fumaric or itaconic acid with vinyl esters, vinyl ethers, vinyl halides and others, polyacrylamides containing carboxylate groups, terpolymers of vinylpyrrolidone/acrylic acid/lauryl methacrylate. Further disclosed is a method of treating hair with the composition. The reference lacks a specific teaching of R having 1 to 6 carbon atoms.

Emmons et al. teach polyurethane thickeners for aqueous compositions, wherein the polyurethanes contain at least three hydrophobic groups interconnected by hydrophilic polyether groups. The polyurethane thickeners are disclosed for use in cosmetic compositions. The end-capping carbon chains of the polyurethane are disclosed as comprising from 4-20 carbon atoms.

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Prencipe et al. teach a personal care composition in the form of a hair or skin-treating gel. Styrene phosphonic acids and vinyl phosphonic acid units are disclosed as comprising a cross-linking polymeric thickening agent. See Col. 14, line 65-Col. 16, line 45.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to teach R or R1 of formula (IV) of Dupuis et al. as an alkyl group having 1 to 6 carbon atoms because a) Dupuis et al. teach R and R1 as a hydrophobic radical, preferably containing 8 to 18 carbon atoms; b) and Emmons et al. teach polyether-polyurethane compounds, such as those taught by Dupuis et al., wherein R and R1 is a hydrophobic group, and exemplify compounds, wherein R and R1 contain from 4-20 carbon atoms; thus, since one would expect a polyether-polyurethane compound having 4-8 carbon atoms to have similar thickening properties in cosmetics, and since Dupuis et al. and Emmons et al. teach that R and R1 can be any hydrophobic radical, it would be within the skill of one in the art to teach R or R1 of formula (IV) of Dupuis as having 1-6 carbon atoms.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to teach the phosphoric acid units of the anionic polymers of Dupuis as styrene phosphonic acids or vinyl phosphonic acids, as taught by Prencipe et al., because a) Dupuis and Prencipe et al. are both directed to cosmetic hair care compositions and both teach anionic polymers comprising fatty acid chains comprising phosphonic acid units; b) Prencipe et al. teach their anionic polymers as imparting viscoelasticity to hair care compositions.

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***Response to 103 (a) Arguments in the Previous Office Action***

Although the 103(a) rejection of the instant Office Action is different from that of the previous Office Action, the Examiner will respond to Applicant's arguments regarding the primary reference, US Pat. No. 6,080,392.

Applicant argues, "Since the present application is directed to a composition comprising two components, not a single compound, no presumption of unpatentability arises". This argument is not persuasive. The Examiner respectfully points out that Dupuis teaches his compound in composition with another compound, the same second component as that claimed in the instant invention. Hence, the polyurethane compound of Dupuis and that of the instant invention are in the same chemical environment, and would thus be expected to behave similarly.

Applicant argues, "homology should not automatically lead to a conclusion of prima facie obviousness". This argument is not persuasive, as homology was not relied upon for the prima facie case of obviousness. See the above 103 motivational statement.

***Unexpected Results***

It is applicant's burden to demonstrate unexpected results over the closest prior art. See MPEP 716.02, also 716.02 (a) - (g). Furthermore, the unexpected results should be demonstrated with evidence that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance. *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Moreover, evidence as to any unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972).

In the instant case, there are no unexpected results.



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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Q Wells whose telephone number is (703) 305-1878. The examiner can normally be reached on T-F (6-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minna Moezie can be reached on (703) 308-4612. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

lqw  
June 6, 2002

RUSSELL TRAVERS  
PRIMARY EXAMINER  
GROUP 1200